

CLAIMS

What is claimed is:

1. A portable pick-up tool for retrieving magnetic objects that are located in hard-to-reach places, comprising:
 - a handle having a first compartment for supporting a battery, a second compartment for supporting a voltage regulator circuit, and a cover for concealing and providing access to only the first compartment;
 - a shaft having a proximal end mounted to the handle and a distal end;
 - a light mounted to the distal end of the shaft and coupled to the battery for illuminating objects in remote locations;
 - an electromagnet mounted to the distal end of the shaft and coupled to the battery for attracting and retaining magnetic objects thereon;
 - a switch for allowing a user to direct the tool toward an object to be retrieved without the tool being attracted to surrounding magnetic components; and
 - a joint positioned in the shaft between a distal end of the shaft and the electromagnet for providing at least one additional degree of freedom of movement with respect to the shaft.
2. The pick-up tool of claim 1, wherein the electromagnet is tubular and the light is located concentrically within the tubular electromagnet.
3. The pick-up tool of claim 1, wherein the handle contains rechargeable batteries and couples to a charging stand to recharge the rechargeable batteries.
4. The pick-up tool of claim 1, wherein the handle is adapted to receive electrical power from a motor vehicle battery.

5. The pick-up tool of claim 1, wherein the shaft is telescopic and flexible with respect to an axis thereof.
6. The pick-up tool of claim 1, wherein the joint is a ball joint that allows the light and electromagnet to swivel with respect to the shaft.
7. The pick-up tool of claim 1, wherein the shaft is hollow and contains sliding and wiping electrical contacts to provide power to the light and the electromagnet in both the collapsed and extended positions.
8. The pick-up tool of claim 1, wherein the switch is a momentary, double-throw switch.
9. The pick-up tool of claim 1, wherein the switch has a first position wherein both the light and the electromagnet are off, a second position wherein only the light is on, and a third position wherein both the light and the electromagnet are on.
10. The pick-up tool of claim 9, wherein the switch has a locking feature to alleviate a need for constant user engagement of the switch in each of the positions.
11. The pick-up tool of claim 1, further comprising a magnet mounted to the handle and adapted to allow the pick-up tool to magnetically adhere to and be retained on a magnetic object.
12. The pick-up tool of claim 1, wherein the light is selected from the group consisting of incandescent and light emitting diode (LED) lights.

13. A portable pick-up tool for retrieving magnetic objects that are located in hard-to-reach places, comprising:

a handle having a first compartment for supporting a battery, a second compartment for supporting a voltage regulator circuit, a cover for concealing and providing access to only the first compartment, and a permanent magnet mounted to the handle and adapted to allow the pick-up tool to magnetically adhere to and be retained on a magnetic object;

a shaft having an axis, a proximal end mounted to the handle, and a distal end, the shaft being telescopic and flexible with respect to the axis;

a light mounted to the distal end of the shaft and coupled to the battery for illuminating objects in remote locations;

an electromagnet mounted to the distal end of the shaft and coupled to the battery for attracting and retaining magnetic objects thereon;

a switch for allowing a user to direct the tool toward an object to be retrieved without the tool being attracted to surrounding magnetic components, the switch having a first position such that both the light and the electromagnet are off, a second position such that only the light is on, and a third position such that both the light and the electromagnet are on; and

a joint positioned in the shaft between a distal end of the shaft and the electromagnet for providing at least one additional degree of freedom of movement with respect to the shaft.

14. The pick-up tool of claim 13, wherein the electromagnet is tubular and the light is located concentrically within the tubular electromagnet.

15. The pick-up tool of claim 13, wherein the handle contains rechargeable batteries and couples to a charging stand to recharge the rechargeable batteries.

16. The pick-up tool of claim 13, wherein the handle is adapted to receive electrical power from a motor vehicle battery.

17. The pick-up tool of claim 13, wherein the joint is a ball joint that allows the light and electromagnet to swivel with respect to the shaft.
18. The pick-up tool of claim 13, wherein the switch is a momentary, double-throw switch.
19. The pick-up tool of claim 13, wherein the shaft is hollow and contains sliding and wiping electrical contacts to provide power to the light and the electromagnet in both the collapsed and extended positions.
20. The pick-up tool of claim 19, wherein the switch has a locking feature to alleviate a need for constant user engagement of the switch in each of the positions.
21. The pick-up tool of claim 13, wherein the light is selected from the group consisting of incandescent and light emitting diode (LED) lights.